



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,194	07/24/2003	Sankar Sambasivan	7125	2708

22922 7590 11/03/2006

REINHART BOERNER VAN DEUREN S.C.  
ATTN: LINDA KASULKE, DOCKET COORDINATOR  
1000 NORTH WATER STREET  
SUITE 2100  
MILWAUKEE, WI 53202

EXAMINER

SPEER, TIMOTHY M

ART UNIT

PAPER NUMBER

1775

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/627,194

Applicant(s)

SAMBASIVAN ET AL.

Examiner

Timothy M. Speer

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-17 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The terms "substantially amorphous" and "substantially non-porous" are considered to be indefinite, since the scope of these terms cannot be ascertained by one having ordinary skill in the art. The term "substantially" is a broad term. See MPEP 2173.05(b)(D). The present claims rely upon the terms at issue to define the invention. The terms, however, are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. There is no way to determine what deviation from "amorphous" and "non-porous" is intended by the terms at issue. Accordingly, the scope of these terms cannot be determined, thus rendering the claims indefinite.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1775

5. Claims 1, 2, 4-9, 11-15, 17 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colebourne (USPN 4,005,232).

Colebourne teaches aluminophosphate coatings which may be formed on a variety of substrates (abstract for instance). Colebourne teaches that such substrates include metal substrates, as presently claimed. Therefore, it would have been obvious to one having ordinary skill in the art to form the coating of Colebourne on a metal substrate, such Colebourne suggests such constructions. Further, Colebourne teaches that the coatings may include carbon particles, as presently claimed (col. 8, line 64).

Regarding the terms "substantially amorphous" and "substantially non-porous," as noted above, these terms are broad. Therefore, it is the Examiner's positions that the coatings of Colebourne meet these limitations. Regarding the claimed "component" between the substrate and film, since the coatings and substrates of Colebourne are the same as those presently claimed, it is the Examiner's position that the coating will interact with the substrate to form such a "component."

In light of the above, it is the Examiner's position that the present claims are prima facie obvious in view of Colebourne.

6. Claims 3, 10, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colebourne in view of Tunker (USPN 4,929,493).

Colebourne was discussed above and fails explicitly the inclusion therein of metal particles. Colebourne, however, teaches that the coatings may include "additional components," such as pigments (col. 8, lines 15-17). Tunker teaches that metal pigment particles may be added to phosphate coatings in order to impart color thereto (col. 2, lines 53-58, for instance).

Art Unit: 1775

Therefore, it would have been obvious to one having ordinary skill in the art to incorporate metal particles into the coatings of Colebourne, since Colebourne suggests the inclusion of pigments and Tunker teaches that metal pigments may be incorporated into phosphate coatings to impart color thereto.

In light of the above, it is the Examiner's position that the present claims are prima facie obvious in view of the applied prior art references.

### *Conclusion*

7. Applicant's arguments filed 12/19/05 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Speer whose telephone number is 571-272-8385. The examiner can normally be reached on M-Th, M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1775

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Timothy M. Speer



JENNIFER MCNEIL  
SUPERVISORY PATENT EXAMINER  
10/30/06